THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte KABUSHIKI KAISHA TOSHIBA

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Appeal No. 97-4019
Reexamination Proceeding 90/004,065[1]

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HEARD: November 14, 1997

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Before HAIRSTON, JERRY SMITH and BARRETT, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

[1] Reexamination proceeding of U.S. Patent No. 4,641,953, issued February 10, 1987, based on Application 06/615,278, filed May 30, 1984.

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-3. An amendment after final adding a new claim 4 was entered by the examiner. The examiner has indicated that claim 4 is allowable. Therefore, this appeal is limited to rejected claims 1-3.

The claimed invention pertains to structure for adjusting the magnification ratio in an image forming apparatus. More specifically, the magnification ratio of an image forming apparatus is changed by a first predetermined amount when a key is depressed for less than a first period of time, and the ratio is changed by a second predetermined amount when the key is depressed for longer than the first period of time. This arrangement allows for the rapid changing of the magnification ratio when the operator keeps the noted key depressed.

Representative claim 1 is reproduced as follows:

1. An image forming apparatus comprising:

an optical means for optically scanning a document and transmitting light beams from said document so as to form an optical image of said document;

magnification ratio setting means for setting a magnification ratio in size of said optical image with respect to said document; and

control means for controlling said optical means in such a manner that said optical image with said magnification ratio set by said magnification ratio setting means is projected on a photosensitive means;

wherein said magnification ratio setting means comprises a first magnification ratio setting means which includes at least one magnification ratio setting key for setting a specified magnification ratio, and a second magnification ratio setting means which includes a magnification ratio increasing key and a magnification ratio decreasing key;

when said magnification ratio increasing key or said magnification ratio decreasing key is operated continuously within a first period of time, said magnification ratio is increased or decreased by a first predetermined value of the magnification ratio, and when said magnification ratio increasing or decreasing key is operated continuously over said first period of time, said magnification ratio is increased or decreased by a second predetermined value of magnification ratio each unit time exceeding said first period of time, said second predetermined value of magnification ratio being larger than said first predetermined value of magnification ratio; and

said control means controls said optical means in such a manner that an optical image having a magnification ratio set by using said first magnification ratio setting means, by using said second magnification ratio setting means or by using said first and second magnification ratio setting means, is projected on said photosensitive medium.

The examiner relies on the following references:

Shibazaki et al. (Shibazaki)	4,543,643	Sep. 24, 1985 (filed May 27, 1983)
Sugiura et al. (Sugiura)	4,646,330	Feb. 24, 1987 (filed Dec. 03, 1981)
Mouthon et al. (Mouthon) (UK Patent Application)	2,070,816	Sep. 09, 1981

Claims 1-3 stand rejected under 35 U.S.C. § 103. As evidence of obviousness the examiner offers Shibazaki in view of Sugiura and Mouthon.

Rather than repeat the arguments of appellants or the examiner, we make reference to the briefs and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the collective evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 1-3. Accordingly, we affirm.

Appellants have indicated that for purposes of this appeal the claims will all stand or fall together as a single group [brief, page 4]. Consistent with this indication appellants have made no separate arguments with respect to any of the claims on appeal. Accordingly, all the claims before us will

stand or fall together. Note In re King, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); In re Sernaker, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983). Accordingly, we will only consider the rejection against claim 1 as representative of all the claims on appeal.

As a general proposition in an appeal involving a rejection under 35 U.S.C. § 103, an examiner is under a burden to make out a prima facie case of obviousness. If that burden is met, the burden of going forward then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

The examiner has pointed out the teachings of Shibazaki, has pointed out the perceived differences between Shibazaki and the claimed invention, and has reasonably indicated how and why Shibazaki would have been modified and/or combined with the teachings of Sugiura and Mouthon to arrive at the claimed

invention. The examiner has, therefore, at least satisfied the burden of presenting a prima facie case of obviousness. The burden is, therefore, upon appellants to come forward with evidence or arguments which persuasively rebut the examiner's prima facie case of obviousness. Appellants have submitted declaration evidence in support of their position and have also presented several arguments in response to the examiner's rejection. Therefore, we consider obviousness based upon the totality of the evidence and the relative persuasiveness of the arguments.

At the outset, we briefly review the salient teachings of the applied prior art. Shibazaki is particularly pertinent to appellants' invention in that both devices are directed to changing the magnification ratio of an image forming apparatus. Shibazaki provides an increasing key and a decreasing key which operate to change the magnification ratio when they are depressed. The examiner and appellants disagree as to whether or not the rate at which the magnification ratio in Shibazaki changes as a result of this key depression. Sugiura teaches an image forming apparatus by the same assignee as Shibazaki in which the number of copies to be made can be changed more rapidly by the continuous depression of an increasing key. Sugiura

implements this function by decreasing the time period in which a predetermined value is changed as the key is held depressed. Finally, Mouthon relates to the setting and correcting of data on the display of a timepiece which permits a rapid change of data when a particular key is depressed. Mouthon implements this function by changing the amount added to the displayed value during each predetermined time interval of key depression. As noted above, the examiner has explained why, in her view, the teachings of these references would have been combined by the artisan to arrive at the invention of claim 1.

Appellants' first argument is that neither the disclosure of Shibazaki nor the declaration evidence submitted by appellants supports combining the teachings of Shibazaki with Sugiura [brief, page 5]. With respect to the first point, appellants take the position that Shibazaki teaches incrementing or decrementing the counter at a fixed rate only. Thus, they assert that there is no basis in Shibazaki for changing the rate of incrementation or decrementation based on the time in which a key is held depressed.

The difference in positions between the examiner and appellants revolves around an interpretation of the following sentence in Shibazaki:

> The UP key 111 and the DOWN key 112 may be kept "on" while increasing the speed of change of values in compliance with the time for operating the keys [column 11, lines 14-16].

The examiner is of the view that this sentence suggests that the rate of change of the magnification counter may be increased during key depression while appellants assert that this sentence is ambiguous and may simply mean that the increment/decrement keys may either be repetitively depressed or held depressed to accomplish the exact same result of a fixed rate of change.

In considering the issue of obviousness under 35 U.S.C. § 103, the question is what the quoted sentence from Shibazaki would have suggested to the artisan. Appellants do not dispute that the sentence may be interpreted in the manner proposed by the examiner, but rather, argue that such interpretation is not clear from the ambiguous language used in the Shibazaki disclosure. In our view, the examiner's interpretation of the sentence is correct when the language is simply evaluated in its literal sense. If the rate of change of incrementation or decrementation were fixed in Shibazaki as argued by appellants, then the "speed of change of values" would always be the same. That is, a fixed rate means a constant speed of change of values. Yet, the disputed sentence in Shibazaki clearly states that the

speed of change of values is increased while the key is kept on. An increase in the speed of change of the values can only suggest to the artisan that the rate at which the values are changing is not fixed. We agree with the examiner that an objective analysis of the disputed sentence in Shibazaki would have suggested to the artisan that the counter value could be changed at an increasing rate as the key is held depressed.

Appellants argue that this single sentence of Shibazaki should not be used in place of the rest of the Shibazaki disclosure which teaches a fixed rate of change. Appellants' position is tantamount to arguing that only the preferred embodiment of a reference may be used in formulating a rejection under 35 U.S.C. § 103. While the preferred embodiment flowcharts of Shibazaki show a fixed value of change in the magnitude ratio counter with each key depression, such description of the preferred embodiment is not inconsistent with a suggestion that alternative embodiments are possible. The entire disclosure of a reference must be considered, even those embodiments which may not be preferred.

Now that we have determined that the examiner's interpretation of the disputed sentence in Shibazaki is correct and would have been recognized as such by the artisan, the

examiner's subsequent analysis must be considered. The examiner noted that if Shibazaki taught increasing the rate at which counter values are changed, then such increase in rate was probably carried out in the same manner as taught in Sugiura, which was assigned to the same assignee as Shibazaki and also related to an image forming apparatus. Sugiura increases the rate of change by continually shortening the predetermined time period rather than by increasing the amount added during each predetermined time period. Mouthon was cited by the examiner to show the conventionality of rapidly changing a displayed value using this latter technique rather than the technique of Sugiura.

Appellants argue that Sugiura only teaches changing the rate at which the number of copies to be made is increased and does not suggest applying the same technique to changing the magnification ratio. This position of appellants attributes no skill to the artisan whatsoever. We cannot accept the proposition that the artisan seeking to change the magnification ratio more rapidly as suggested by the disputed sentence in Shibazaki would not look to the manner in which other values in the display counter of an image forming apparatus are changed. The artisan would not limit his consideration only to other magnification ratio counters as argued by appellants. The rapid

increase of a display counter is the same regardless of what the counter is keeping track of.

With respect to the declaration evidence submitted by Matsumoto and Tashiro, appellants argue that both of these experienced engineers agree that the flowcharts of Shibazaki do not disclose increasing the speed of change of the magnification ratio, and that such interpretation would be inconsistent with the rest of the Shibazaki disclosure [brief, page 8]. The statements of Matsumoto and Tashiro say nothing more than that the alternative embodiment suggested by Shibazaki is not the same as the preferred embodiment disclosed by Shibazaki. These statements are correct but irrelevant. As we noted above, the artisan is not limited to only those teachings which make up the preferred embodiment of a disclosure.

Matsumoto and Tashiro also declare that the Shibazaki disclosure does not unambiguously teach the idea of automatically adjusting the rate of magnification ratio change during operation [Matsumoto Decl., ¶ 11 and 12; Tashiro Decl., ¶ 10 and 11]. Although we cannot say that the ambiguity found by declarants in the Shibazaki disclosure does not exist, we can say that the artisan would have considered the examiner’s interpretation even if other interpretations were possible. Even though appellants

view the examiner's interpretation as the least likely scenario, we are of the view that the examiner's interpretation is the correct one when the language of Shibazaki is objectively and literally considered. Therefore, the evidence in the form of the Matsumoto and Tashiro declarations fails to provide facts which demonstrate that the examiner's rejection is in error.

Appellants argue that Mouthon is not reasonably pertinent to the problem facing the inventor. However, appellants define the problem so narrowly that only an anticipatory reference would be related to the problem as they pose it. The problem is not how to rapidly increase the displayed value of magnification ratio, but rather, how to rapidly change any displayed value in order to save time. Thus, the artisan would not be constrained to consider only those teachings which explicitly consider magnification ratios. The relevant art is the art of rapidly changing display values, and Mouthon is directly related to this problem. Therefore, we do not accept appellants' argument that the artisan would not have looked to Mouthon to solve the problem faced by appellants.

In summary, we have considered all the arguments and the evidence in this case, and we conclude that the examiner's position that the applied references would have suggested the

obviousness of the claimed invention is more persuasive than appellants' rebuttal arguments. Therefore, we sustain the rejection of claims 1-3 as proposed by the examiner. Accordingly, the decision of the examiner rejecting claims 1-3 is affirmed.

Further proceedings in this case may be taken in accordance with 35 U.S.C. §§ 141 to 145 and 306, and 37 CFR §§ 1.301 to 1.304. Note also 37 CFR § 1.197(b). If the patent owner fails to continue prosecution, the reexamination proceeding will be terminated, and a certificate under 35 U.S.C. § 307 and 37 CFR § 1.570 will be issued cancelling the patent claims, the rejection of which have been affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

KENNETH W. HAIRSTON Administrative Patent Judge	)
JERRY SMITH Administrative Patent Judge	) BOARD OF PATENT) APPEALS AND) INTERFERENCES
LEE E. BARRETT Administrative Patent Judge	)

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